



## CREATIVE PROBLEM SOLVING

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**Purpose:** To encourage Health Science students to analyze the problem solving process and to work as a team to apply their problem solving skills in creating a solution to a hypothetical healthcare-related problem.

**Description of Event:** This event will involve two rounds of competition. Round One will consist of a written test to evaluate the team's understanding of problem solving processes and theories. The top scoring teams will advance to Round Two and will be given a potential problem related to a healthcare issue or the healthcare community. Teams will have 30 minutes to analyze the problem. Selected resource materials related to the problem will be provided. At the end of the preparation time, teams will have ten (10) minutes to present their solution to a panel of judges.

**Dress Code:** Competitors shall wear the HOSA uniform or proper business attire. Bonus points will be awarded for proper dress in both rounds. All team members must be properly dressed to receive bonus points.

- Rules and Procedures**
1. Competitors in this event must be active members of HOSA in good standing in the category in which they are registered to compete (Secondary or Postsecondary/Collegiate).
  2. Teams must be composed of three (3) or four (4) members.
  3. Each team will be evaluated in Round One by a fifty (50) item multiple choice written test. Competitors will be given one hour to complete the test which will be administered during the event orientation session. **No proxies are allowed for this event.** Team scores will be averaged to determine who will qualify for Round Two.

### Round I: Written Test Plan

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|---|-----|
| • Theory/Skills of Creative Thinking              | 30% |
| • Problem Identification                          | 10% |
| • Clarification of Problems/Developing Objectives | 15% |
| • Problem Solving Strategies                      | 10% |
| • Examining constraints/developing alternatives   | 15% |
| • Sharing Decisions/Implementation                | 10% |
| • Professional Success Skills                     | 10% |
| ○ Personal and Professional Transformation        |     |
| ○ Public Speaking                                 |     |
| ○ Professional Appearance and Behavior            |     |
| ○ Personal Health                                 |     |

4. All official references are used in the development of the written test.
  - Dombroski, Thomas. *Creative Problem Solving: The Door to Individual Success and Change*. Universe.com; ISBN 1583487239.
  - Higgins, James. *101 Creative Problem Solving Techniques*. The New Management. Latest Edition. ISBN 1-883629-00-4
  - Gaviola, Sandra. *My Pocket Mentor*. Delmar Publishing. ISBN: 1401835082
  - Adair, John. *Decision Making & Problem Solving Strategies*. ISBN: 0749449187
5. The Round Two order of competition will be pre-assigned on a random basis. A maximum of twenty (20) secondary and ten (10) postsecondary/collegiate teams will advance to Round Two.

6. The selection of the Round Two problem shall be the responsibility of the Category Chair and Lieutenant for this category. Each team will be asked to solve the same problem. The problem is a secret problem that is not disclosed until the event begins.
7. The Round Two problem is a secret topic. Professional ethics demand that competitors DO NOT discuss or reveal the secret topic until after the event has concluded. Competitors who violate this ethical standard will be disqualified.
8. Resources will be provided to teams for use during their 30 minute preparation time, if applicable. No other printed materials may be brought into the preparation room. Competitors will be provided with 5" X 8" index cards for taking notes and for use during their oral presentation. Teams will also be provided with flip chart paper and markers for use during the preparation and presentation.
9. The section leader will announce when teams have two (2) minutes remaining in the preparation room by saying "You have two minutes remaining. Please conclude your preparation, gather your materials, and prepare to be escorted to the presentation room."
10. At the conclusion of the 30 minute preparation time, teams will be escorted to the room for their oral presentation. Teams may take the 5" x 8" index cards they prepared during the preparation time, and the flip chart paper and markers. The flip chart paper and index cards may be used during the oral presentation.
11. Teams will be allowed a maximum of ten (10) minutes for their oral presentation of a solution to the secret problem. Time cards will be shown with five (5 ) minutes and one (1) minute remaining. Time will be stopped at the end of ten (10) minutes. Following the oral presentation, the judges will have a maximum of five (5) minutes to ask questions related to the problem and the team's solution.
12. Should a tie occur, the highest team average from the written test is used to break the tie.
13. Competitors must be familiar with and adhere to the **"General Rules and Regulations of the National HOSA Competitive Events Program."**

#### **Required Personnel (Per Section):**

1. One Event Manager (Per Event)
2. One Section Leader per section
3. Two - three judges per section (Judges should be professionals with experience in a career area related to the secret problem)
4. Preparation room attendant (One per preparation room)
5. Two Courtesy Corps members per section
6. One time-keeper per section (if necessary)

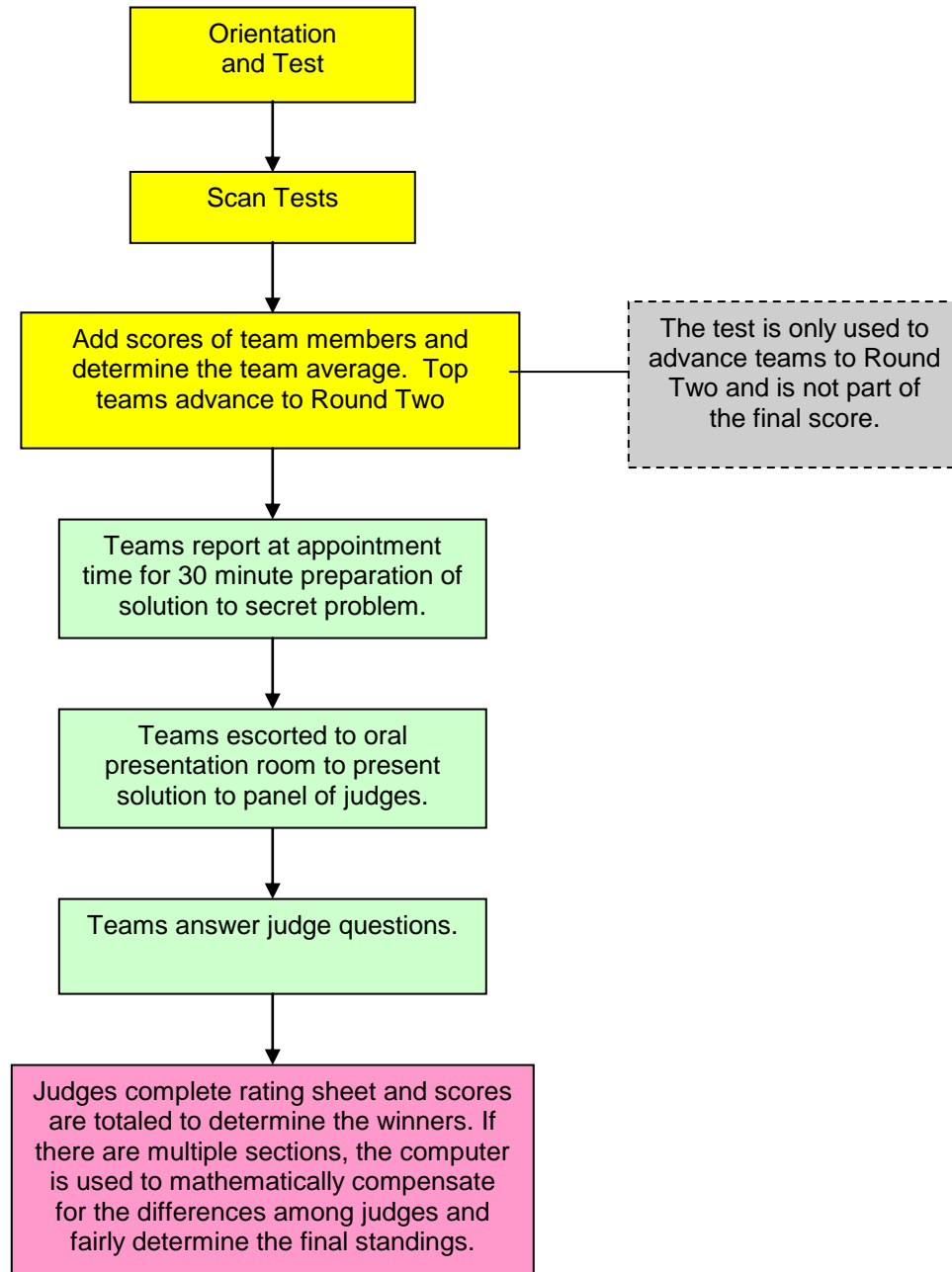
#### **Facilities, Equipment and Materials (Per Section):**

- \*\*\* 1. Testing room with tables/chairs; or schoolroom desks/chairs for total number of competitors
2. Number 2 lead pencils with an eraser
3. Test packets which are pre-numbered and Scantron answer forms
4. Preparation room with table and chairs – If there are multiple sections, more than one team will prepare at the same time in the preparation room.
5. Copy of secret problem, one for each team member and the judges
6. 5" X 8" index cards
7. Flip chart paper – as many pages as needed per team
8. Flip chart pad or easel in presentation room
9. Colored Markers
10. Masking tape (if self-adhesive flip chart paper is not used)

11. Resources specified in secret problem, one set per preparation room/table
12. Time cards with five (5) minutes, one (1) minute and stop.
- \*\*\* 13. Pencils/pens for competitors' use during the preparation

\*\*\* This is the only equipment to be brought to event by competitors.

## Event Flow Chart



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## JUDGE'S RATING SHEET

Section # \_\_\_\_\_ Level \_\_\_\_\_ SS \_\_\_\_\_ PS/Collegiate  
 Team # \_\_\_\_\_ Judge's Signature \_\_\_\_\_

| Items Evaluated  | Points Possible |           |           |           |           | Points Allocated |
|--|-----------------|-----------|-----------|-----------|-----------|------------------|
|  | Superior        | Excellent | Good      | Fair      | Poor      |                  |
| 1. Understanding of problem/health issue.                                | 20              | 16        | 12        | 8         | 4         |                  |
| 2. Solution was clear and logical.                                       | 10              | 8         | 6         | 4         | 2         |                  |
| 3. Solution was financially sound and workable.                          | 10              | 8         | 6         | 4         | 2         |                  |
| 4. Solution showed good use of research/expert data.                     | 10              | 8         | 6         | 4         | 2         |                  |
| 5. An imaginative and innovative approach was used to solve the problem. | 10              | 8         | 6         | 4         | 2         |                  |
| 6. Evidence of teamwork in reaching a solution.                          | 10              | 8         | 6         | 4         | 2         |                  |
| 7. Organization, delivery and quality of oral presentation.              | 10              | 8         | 6         | 4         | 2         |                  |
| 8. Quality of answers to judge's questions.                              | 10              | 8         | 6         | 4         | 2         |                  |
| 9. Total group involvement in presentation of solution.                  | 10              | 8         | 6         | 4         | 2         |                  |
| <b>TOTAL POINTS</b>  | <b>100</b>      | <b>80</b> | <b>60</b> | <b>40</b> | <b>20</b> |                  |